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ABSTRACT

The purpose of this research was to investigate nonverbal communication through channel perception while observing any significant differences among race, sex, and social class background variables. In addition, differences and/or similarities in Afrocentric and Eurocentric world views in regard to nonverbal channel perception and cultural differences were studied. Rosenthal and his associates' (1979) Profile of Nonverbal Sensitivity test (PONS), representing eleven channels of nonverbal behavior, was administered to 172 American black college students (n=66) and white college students (n=106). The Belief Systems Analysis scale (BSA) by Myers was given to 105 of the 172 subjects; this scale determines the degree to which a person subscribes to a particular cultural world view. A three-way (race X sex X social class) multiple analysis of variance was performed on the eleven channels plus the total score for the PONS test. The data indicated a significant main effect due to the race variable and sex variable, for six and five channels respectively, along with the total scores. White college students scored higher than black students and females scored higher than males on these channels. Significant differences with the social class variable only occurred within one of the channels, and sex X social class interaction was indicated within another. A three-way (race X sex X social class) analysis of variance on the BSA scores indicated that black college students scored higher than white college students. No significant differences occurred between social classes; however a sex X social class interaction was indicated. Males from nonprofessional family backgrounds, and females from professional and nonprofessional backgrounds scored higher than males from professional family backgrounds. There were no significant differences between the sexes within the nonprofessional family background variable. (Author/GC)

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NONVERBAL COMMUNICATION AND CHANNEL PERCEPTION:

Their Relationship to the Afrocentric World View

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ABSTRACT

The purpose of this research was to investigate nonverbal communication through channel perception while observing any significant differences among race, sex and social class background. In addition, differences and/or similarities in Afrocentric and Eurocentric world views in regard to nonverbal channel perception and cultural differences were also studied. Rosenthal and his associates' (1979) Profile of Nonverbal Sensitivity test (PONS, full - 220 items) representing eleven channels of nonverbal behavior was administered to 172 American black (n=66) and white (n=106) college undergraduate and graduate students at The Ohio State University (1982). The subjects included 72 males and 100 females. The Belief Systems Analysis scale (BSA) by Myers (1982) was given to 105 of the 172 subjects. This scale determines the degree to which a person ascribes to a particular cultural world view, dichotomized in terms of Afrocentric versus Eurocentric. The Pearson Correlation did not indicate a significant relationship between the BSA scores with the Total scores from the PONS test. A three-way (Race X Sex X Social Class) Multiple Analysis of Variance was performed on the eleven channels plus the total score for the PONS test. The data indicated a significant main effect due to the Race variable ($p < .05$), and Sex variable ($p < .05$), for six and five channels respectively, along with the total scores. White college students scored higher than black college students, and females scored higher than males on these channels. Significant differences with the Social Class variable only occured within one of the channels, and Sex X Social Class interaction was indicated within another. A three-way (Race X Sex X Social Class) Analysis of Variance on the BSA scores indicated that black college students scored higher than white college students. Females scored higher than males at the .05 level, but Scheffé's post hoc test rejected this finding. No significant differences occured between social classes, however a Sex X Social Class interaction was indicated. Males from nonprofessional family backgrounds scored higher than males from professional family backgrounds, and females from both types of backgrounds scored higher than males from professional family backgrounds. There were no significant differences between the sexes within the nonprofessional family background variable.

Nonverbal Communication and Channel Perception:
Their Relationship to the Afrocentric World View

"Is there a signalling code --a language without words--common to all men?" This question has often been debated and contradictory statements have been recorded in scientific literature. As long ago as the 19th century Charles Darwin in his book, The Expression of the Emotions in Man and Animals, disclosed his belief that there were certain similarities in the expressive behavior of people, regardless of their cultural backgrounds. The purpose of this research was to investigate nonverbal communication through channel perception while observing any significant differences among race, sex, and social class background. Operationally, "channels" is the term used to describe various levels of nonverbal communication such as hand gestures, body and eye movements, facial expressions, head nods, tones of voice, and postures. Another dimension to the study, was to observe any differences and/or similarities in Afrocentric and Eurocentric world views in regard to nonverbal channel perception and cultural differences.

Nonverbal communication research has been complicated by behaviors that have wide ranges and are, at least in some way, nonverbal. Many investigators are aware that nonverbal communication remains far from being well understood even though it plays a major role in human interaction within individuals' daily

lives. One of the many reasons why knowledge on nonverbal communication is so incomplete, perhaps is due to the American society's strong verbal orientation. Nonverbal messages are so heavily embedded within the day-to-day activities, functions, and cultures, that they go unnoticed.

Researchers are in the beginning stages of learning the effects nonverbal behavior have on other people, the individual differences involved, as well as establishing ways to interpret, relate and apply toward clinical, educational, industrial, etc., types of settings (Rosenthal, Hall, DiMatteo, Rogers & Archer, 1979). In a broad sense, research in nonverbal communication includes social intelligence (Walker & Foley, 1973), empathy (Campbell, Kagan, & Krathwol, 1971), judging personality (Cline, 1964), and person perception (Taguiri, 1969). Often, such decoding is intertwined with other behaviors and skills to an unknown extent. They include motivational states, wisdom in choosing one's social responses, knowledge of personal dispositions, and the ability to judge situational or contextual cues.

There have been researchers (e.g., Gitter, Black, & Mostofsky, 1972a; 1972b) who were interested in black and white differences in decoding skills of nonverbal communication. Gitter and his associates discovered, in two studies where they used still photographs as stimuli on college students, that blacks were better decoders than whites. When Gitter and Quincy (1968) sampled four to six year old black and white subjects, they were unable to find any differences in decoding

skills of nonverbal cues. Izard (1971) found no differences between black and white children, ages five to seven, using the still photos. However, Kellog and Eagelson (1931), in their study of blacks and whites, ages five to fourteen, found black children performing significantly poorer than their white counterparts in decoding nonverbal cues using still photos for seven of the ten age levels.

Nonverbal communication has had to overcome problems in recording, coding, analyzing, and reproducing. An increase within the investigation of this area has been developing by the diffusion of film and videotape technology represented in this study. Newmeyer (1970) found, in his research employing motion picture stimuli, developed by Gitter, no overall differences in decoding skills between black and white adolescent boys; but he did find whites to be superior at decoding video cues while blacks were better at decoding audio cues. Apparently, there are no overall conclusions that one may establish, based on the aforementioned data using these methods (i.e., still photos and movies, video versus audio channels) of analysis.

In an attempt to design a reliable research method, Rosenthal and his associates (1979) developed the Profile of Nonverbal Sensitivity Test (PONS) which makes it possible to study a wide range of nonverbal behaviors collectively. The PONS test is a forty-seven minute black and white 16mm film with soundtrack, that is composed of 220 numbered auditory and visual segments. These segments are a randomized presentation of twenty short scenes portrayed by a young white woman, each scene represented in eleven "channels" of nonverbal communication. The test taker's

assignment is to view the film and for each segment, to circle the label that correctly describes the scene enacted in the segment. He or she makes this choice from two alternative labels printed on an answer sheet containing 220 such pairs of descriptions. Each segment is followed by a pause long enough for the decision to be made and recorded. (p. 23).

Within the PONS test, eleven nonverbal channels are isolated. Three of these eleven are considered "pure" visual channels: (1) the face; (2) body from the neck to the knees; and (3) the entire figure (face and body down to the thighs). There are two other "pure" auditory channels that utilize two unique techniques to mask the words spoken, but preserve the other characteristics of "paralanguage," (i.e., tone of voice, pitch, and affect): (4) randomized spliced voice (random scrambling of the speaker's taped voice); and (5) content-filtered voice (an electronic treatment that removes the high frequencies that help identify specific words). The last two (auditory) channels disguise the exact words being said, but the possibility still exists for some individuals to tell the way is is said (i.e., soft, loud, friendly, hostile, etc.). In addition to these pure channels are six channels which are paired combinations of a single visual channel with a single auditory channel: (6) face and randomized spliced voice; (7) face and content-filtered voice; (8) body and randomized spliced voice; (9) body and content-filtered voice; (10) figure and randomized spliced voice; and (11) figure and content-filtered voice. For each channel tabulated, the maximum score is 20.

A total score (220 maximum) for the overall PONS test is provided.

Because the PONS test offers complexity, it makes it possible to study the accuracy of individuals decoding a variety of scenes in various nonverbal channels. These design characteristics of the PONS test allow one to pursue a complex research program focussing on the distribution of this unique type of nonverbal sensitivity in the population. The test has been shown to be reliable across different encoders (i.e., Rosenthal, Hall, & Zukerman, 1978) and perhaps can be used to determine whether the sensitivity is related to life circumstances. The PONS test reveals whether an individual (decoder), male or female, can recognize emotions that the encoder or sender is trying to display.

The Belief Systems Analysis scale (BSA) was developed by Myers in 1982, to determine the degree to which a person ascribes to a particular cultural world view, dichotomized in terms of Afrocentric versus Eurocentric. The scale was predicated on the assumption that certain philosophical assumptions underpin the generalized cultural world view (e.g., African, Asian, European) of various cultural groups (Nicholos, 1976). These philosophical assumptions work together to structure a conceptual system which can be tapped by measuring the degree of endorsement of specific personal beliefs. The higher the score (100 being the maximum score), the more Afrocentric the measures indicate, while a lower score identifies an Eurocentric world view.

Although there is empirical research scattered in the literature discussing cross cultural concerns, it has almost always been characterized by one of more of the following limitations:

(1) the research in nonverbal behavior has been limited to one channel, with most studies using facial expressions in still photographs;

(2) most of the cultural samples have been small, comparing results of two or three subjects with nine being the largest;

(3) there are no consistent patterns with respect to the variation among different cultures in interpreting the same nonverbal materials.

Virtually nothing exists in any of the scientific journals that addresses black and white differences and/or similarities, or social class differences between or within groups while testing college age students, utilizing the full (220 item) PONS test. Nor has research been conducted on Afrocentric and Eurocentric world views in relation to nonverbal channel perception. The following questions were investigated:

(1) Are there significant differences in the scores (PONS test and BSA scale), that identify racial distinctions within the sample?

(2) Do results from the PONS test and BSA scale indicate sexual differences?

(3) Is there a difference in the PONS test and BSA scores for those raised in families with professional backgrounds versus the families with nonprofessional backgrounds?

(4) Is there a correlation between the BSA scores and and the PONS test total scores?

Design & Methodology

The study implemented a 2 X 2 X 2 factorial design (Race X Sex X Social Class). The full 220 item PONS test representing eleven channels of nonverbal behavior, including visual and auditory channels was administered to 172 American black (n = 66) and white (n = 106) college undergraduate and graduate students from across disciplines, at The Ohio State University in 1982. The sample included 72 males and 100 females. Subjects also indicated their social class background as to whether they were raised by parents/guardians who had profession positions or nonprofessional jobs, by stating their parents'/guardians' professions. These were then coded as "white-collar" jobs or "blue-collar" jobs, versus using an income index which may not provide such information. The BSA scale was given to 105 of the 172 subjects (blacks n = 58, whites n = 47; males n = 40, females n = 65).

A 2 X 2 X 2 (Race X Sex X Social Class) Analysis of Variance was performed analyzing the eleven channels simultaneously. Intercorrelations of the channels were also observed. Scheffé's Post Hoc test was implemented to identify specific group differences.

Results

Tables 1 and 2 summarize the overall mean scores for the PONS test and BSA scale, in addition to providing mean scores by Race, Sex and Social Class. The overall mean age was $X = 21.37$ (n=172), with no significant age differences among the Race, Sex or Social Class variables.

The Partial Correlation procedure indicated significant intercorrelational relationships at the $p < .01$ level, among most of the PONS channels with the exception of Figure (FIG) with Content-Filtered Voice (CF) and Content-Filtered Voice with Face and Content-Filtered Voice (FCF), and Body plus Randomized Spliced Voice (BRS) with Content-Filtered Voice. The Pearson Correlation did not indicate a significant relationship between the BSA scores with the Total score from the PONS test.

PONS Test

A three-way (Race X Sex X Social Class) Multiple Analysis of Variance was performed on the eleven channels plus the total score for the PONS test. The data indicated a significant main effect due to the Race variable at the $p < .05$ level for the following channels (Tables 3 - 10):

(1) Face - F8.83, $p < .01$

(2) Figure (FIG) - F9.81, $p < .01$

(3) Randomized Spliced Voice (RS) - F17.12, $p < .001$

(4) Body and Randomized Spliced Voice (BRS) - F12.55, $p < .001$

(5) Body and Content-Filtered Voice (BCF) - F3.64, $p = .05$

(6) Figure and Randomized Spliced Voice (FRS) -F6.35, $p = .01$

(7) Figure and Content-Filtered Voice (FGCF) - F7.85, $p < .01$

(8) Total Score - F13.76, $p < .001$

Table 1

Full PONS Test Mean Scores

by

Race, Sex and Social Class

Channel	Overall (n=172)		Race				Sex				Social Class			
			Blacks (n=66)		Whites (n=100)		Males (n=72)		Females (n=100)		Professional (n=117)		Nonprofessional (n=55)	
	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD
FACE	16.09	5.02	15.64	2.21	16.38	1.88	15.64	2.37	16.42	1.70	16.27	1.90	15.71	2.28
BODY	15.19	2.19	14.89	2.02	15.37	2.27	14.83	2.51	15.44	1.89	15.23	2.12	15.09	2.36
FIGURE	15.84	2.06	15.35	2.38	16.15	1.78	15.38	2.36	16.18	1.76	16.03	1.98	15.42	2.19
RS	12.12	1.99	11.41	2.10	12.57	1.78	11.96	2.09	12.24	1.91	12.18	1.99	12.00	1.98
CF	11.69	2.12	11.38	2.28	11.88	2.20	11.63	2.23	11.73	2.05	11.89	2.11	11.26	2.10
FRS	17.22	2.19	17.00	2.39	17.36	2.06	16.63	2.60	17.65	1.74	17.45	2.02	16.73	2.47
FCF	16.08	2.10	15.94	2.16	16.16	2.07	15.53	2.51	16.47	1.65	16.12	2.13	15.98	2.07
BRS	14.91	2.17	14.26	2.22	15.31	2.05	14.63	2.42	15.11	1.96	15.03	2.10	14.64	2.31
BCF	14.59	2.25	14.21	2.29	14.83	2.20	14.47	2.59	14.68	1.98	14.78	2.19	14.30	2.34
FGRS	16.28	2.05	15.89	2.30	16.53	1.85	15.86	2.62	16.60	1.46	16.43	1.84	15.58	2.45
FGCF	16.73	2.25	16.18	2.40	17.07	2.09	16.52	2.88	16.87	1.46	16.95	2.01	16.26	2.64
TOTAL	166.74	15.99	162.15	16.91	169.59	14.76	163.06	20.51	169.39	11.08	168.36	14.59	163.29	18.29

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Table 2

Belief Systems Analysis Mean Scores

by

Race, Sex and Social Class

Variable	n	X	SD
Race			
Blacks	58	66.47	10.53
Whites	47	62.23	6.51
Sex			
Males	40	62.78	8.47
Females	65	65.68	9.46
Social Class			
Professional Background	67	63.78	8.99
Nonprofessional Background	38	65.97	9.41
Total	105	64.57	9.17

Table 3

ANOVA of Full PONS Test Scores

for the Face Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	33.1696	33.1691	8.83**
Sex	1	25.5405	25.5405	6.80**
Social Class	1	8.4955	8.4955	2.26
Race X Sex	1	9.7577	9.7577	2.60
Race X Social Class	1	1.0208	1.0208	0.27
Sex X Social Class	1	16.5549	16.5549	4.41*
Race X Sex X Social Class	1	0.1962	0.1962	0.05
Residual	164	615.7764	3.7547	
Total	171	710.5116		

*p < .05
**p < .01

Table 4

ANOVA of Full PONS Test Scores

for the Figure Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	38.2820	38.2820	9.81**
Sex	1	27.1266	27.1266	6.95**
Social Class	1	9.4069	9.4069	2.41
Race X Sex	1	7.3136	7.3136	1.87
Race X Social Class	1	1.4630	1.4630	0.37
Sex X Social Class	1	3.0471	3.0471	0.78
Race X Sex X Social Class	1	0.0962	0.0962	0.02
Residual	164	640.0261	3.9026	
Total	171	726.7616		

**p< .01

Table 5

ANOVA of Full PONS Test Scores

for the Randomized Spliced Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	61.6350	61.6350	17.12**
Sex	1	3.3210	3.3210	[illegible]
Social Class	1	0.0036	0.0036	0.00[illegible]
Race X Sex	1	11.1090	11.1090	3.09
Race X Social Class	1	1.4045	1.4045	0.39
Sex X Social Class	1	0.3761	0.3761	0.10
Race X Sex X Social Class	1	6.1010	6.1010	1.69
Residual	164	590.4857	3.6005	
Total	171	674.4360		

**p < .01

Table 6

ANOVA of Full PONS Test Scores

for the Body and Randomized Spliced Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	55.1830	55.1830	12.55***
Sex	1	9.8466	9.8466	2.24
Social Class	1	1.8922	1.8922	0.43
Race X Sex	1	0.1995	0.1995	0.05
Race X Social Class	1	0.5035	0.5035	0.11
Sex X Social Class	1	7.3954	7.3954	1.68
Race X Sex X Social Class	1	10.5609	10.5609	2.40
Residual	164	720.9305	4.3959	
Total	171	806.5116		

***p<.001

Table 7

ANOVA of Full PONS Test Scores

for the Body and Content-Filtered Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	18.1801	18.1801	3.64*
Sex	1	1.8072	1.8072	0.36
Social Class	1	9.1426	9.1426	1.83
Race X Sex	1	14.6090	14.6090	2.93
Race X Social Class	1	2.3501	2.3501	0.47
Sex X Social Class	1	0.7078	0.7078	0.14
Race X Sex X Social Class	1	0.2216	0.2216	0.04
Residual	164	818.4932	4.9908	
Total	171	865.5116		

*$p \leq .05$

Table 8

ANOVA of Full PONS Test Scores

for the Figure and Randomized Spliced Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	25.3294	25.3294	6.35**
Sex	1	23.7213	23.7213	5.94**
Social Class	1	5.1774	5.1774	1.30
Race X Sex	1	9.4605	9.4605	2.37
Race X Social Class	1	0.8831	0.8831	0.22
Sex X Social Class	1	2.0412	2.0412	0.51
Race X Sex X Social Class	1	0.0285	0.0285	0.01
Residual	164	654.3994	3.9902	
Total	171	721.0407		

**$p \leq .01$

Table 9

ANOVA OF Full PONS Test Scores

for the Figure and Content-Filtered Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	37.8795	37.8795	7.85**
Sex	1	4.9025	4.9025	1.02
Social Class	1	12.3431	12.3431	2.56
Race X Sex	1	0.1832	0.1832	0.04
Race X Social Class	1	0.2884	0.2884	0.06
Sex X Social Class	1	12.1188	12.1188	2.51
Race X Sex X Social Class	1	5.1394	5.1394	1.07
Residual	164	791.3021	4.8250	
Total	171	864.1570		

**p < .01

Table 10

ANOVA Of Full PONS Test Scores

for Total Scores

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	3137.0402	3137.0402	13.76***
Sex	1	1679.6590	1679.6590	7.37**
Social Class	1	641.0163	641.0163	2.81
Race X Sex	1	246.7340	246.7340	1.08
Race X Social Class	1	8.4663	8.4663	0.04
Sex X Social Class	1	591.0107	591.0107	2.59
Race X Sex X Social Class	1	4.5147	4.5147	0.02
Residual	164	37,394.7856	228.0107	
Total	171	43,703.2267		

**p < .01
***p < .001

Scheffé's post hoc test revealed that whites scored significantly higher than blacks among these channels at the $p < .05$ level, with the exception of the Body and Content-Filtered Voice channel, which was rejected.

(1) FACE - $F(1,90)$ 5.94, $p < .05$

(2) FIG - $F(1,90)$ 6.68, $p < .05$

(3) RS - $F(1,90)$ 15.21, $p < .001$

(4) BRS - $F(1,90)$ 10.19, $p < .01$

(5) FRS - $F(1,90)$ 4.18, $p < .05$

(6) FGCF - $F(1,90)$ 6.67, $p < .05$

(7) TOTAL - $F(1,90)$ 9.88, $p < .01$

Significant differences regarding the race variable did not occur for the remaining channels:

(1) Body (BODY)

(2) Content-Filtered Voice (CF)

(3) Face and Randomized Spliced Voice (FRS)

and (4) Face and Content-Filtered Voice (FCF)

Results indicated significant differences in mean scores of males and females for the following channels and total scores (Tables 3, 4, 11, 12, 8, and 10):

(1) Face -F7.37, $p < .01$

(2) Figure (FIG) - F6.95, $p < .01$

(3) Face and Randomized Spliced Voice (FRS) - F9.76, $p < .01$

(4) Face and Content-Filtered Voice (FCF) - F8.62, $p < .01$

(5) Figure and Randomized Spliced Voice (FGRS) - F5.94, $p < .01$

(6) Total - F7.37, $p < .01$

Table 11

ANOVA of Full PONS Test Scores

for the Face and Randomized Spliced Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	12.7725	12.7725	2.83
Sex	1	43.9797	43.9797	9.76**
Social Class	1	18.6066	18.6066	4.13*
Race X Sex	1	2.9241	2.9241	0.65
Race X Social Class	1	2.2344	2.2344	0.50
Sex X Social Class	1	1.6037	1.6037	0.36
Race X Sex X Social Class	1	0.1643	0.1643	0.04
Residual	164	739.3194	4.5080	
Total	171	821.6047		

*p < .05
**p < .01

Table 12

ANOVA of Full PONS Test Scores

for the Face and Content-Filtered Voice Channel

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	6.6604	6.6604	1.54
Sex	1	37.1630	37.1630	8.62**
Social Class	1	0.6274	0.6274	0.15
Race X Sex	1	2.1291	2.1291	0.49
Race X Social Class	1	1.1102	1.1102	0.26
Sex X Social Class	1	0.9722	0.9722	0.23
Race X Sex X Social Class	1	0.3576	0.3576	0.08
Residual	164	706.9976	4.3110	
Total	171	756.0174		

**p < .01

Scheffé's post hoc test indicated that females scored significantly higher than males at the .05 level among these channels and total scores:

(1) FACE - $F(1,90)$ 6.79, $p < .05$

(2) FIG - $F(1,90)$ 7.21, $p < .01$

(3) FRS - $F(1,90)$ 9.66, $p < .01$

(4) FCF - $F(1,90)$ 8.58, $p < .01$

(5) FGRS - $F(1,90)$ 6.04, $p < .05$

(6) TOTAL - $F(1,90)$ 7.36, $p < 01$

Significant results pertaining to the sex variable did not occur for:

(1) Body

(2) Randomized Spliced Voice

(3) Content-Filtered Voice

(4) Body and Randomized Spliced Voice

(5) Body and Content-Filtered Voice

(6) Figure and Content-Filtered Voice

Significant differences between types of social class backgrounds were only indicated within the Face and Randomized Spliced Voice channel, F4.13, $p < .05$. Scheffé's post hoc test showed that subjects raised by parents/guardians with professional backgrounds, scored higher than subjects whose parents/guardians had nonprofessional backgrounds ($F1,90$, 4.31, $p < .05$). However, results from the Face channel indicated a Sex X Social Class interaction (F4.41, $p < .05$), whereby Scheffé's post hoc test demonstrated that males with professional backgrounds scored significantly higher ($F1,90$, 9.04, $p < .01$), than males with

nonprofessional backgrounds. Females with nonprofessional backgrounds scored significantly higher than males with nonprofessional backgrounds ($F_{1,90}$, 11.72, $p < .001$). Females with professional backgrounds scored higher than males with nonprofessional backgrounds ($F_{1,90}$, 14.53, $p < .001$).

BSA Scale

A three-way (Race X Sex X Social Class) Analysis of Variance was performed on the BSA scores (Table 10). The data indicated significant main effects due to the following variables: Race (F6.63, $p \leq .01$), Sex (F3.81, $p < .05$), and a Sex X Social Class interaction (F7.30, $p \leq .01$). Scheffé's test showed that blacks scored significantly higher than whites ($F_{1,90}$, 8.53, $p < .01$). However, the post hoc test rejected the results indicating significance within the scores between males and females at the .05 level.

Results from the Sex X Social Class interaction indicated that males with nonprofessional backgrounds scored higher than males with professional backgrounds on the BSA scale ($F_{1,90}$, 3.96, $p < .05$). Females from professional backgrounds scored significantly higher than males from professional backgrounds ($F_{1,90}$, 6.58, $p < .05$). Females from nonprofessional backgrounds scored higher than males from professional backgrounds ($F_{1,90}$, 5.07, $p < .05$).

Table 13

ANOVA of Belief Systems Analysis Scores

by Race, Sex and Social Class

Source	df	SS	MS	F
Race	1	362.7968	362.7968	6.63**
Sex	1	208.5239	208.5239	3.81*
Social Class	1	27.6750	27.6750	0.51
Race X Sex	1	25.8583	25.8583	0.47
Race X Social Class	1	3.3489	3.3489	0.06
Sex X Social Class	1	399.8790	399.8790	7.30**
Race X Sex X Social Class	1	21.9897	21.9897	0.40
Residual	90	4,928.1839	54.7576	
Total	104	8,735.7143		

*$p \leq .05$
**$p \leq .01$

Discussion

In analyzing the eleven nonverbal communication channels, Partial Correlations indicated significance for most of the channels at the $p < .01$ level. However, the Content-Filtered Voice channel("pure auditory"involving the removal of high frequencies to guise the identity of specific words), when compared to three of the eleven channels had no significant correlations. These other channels included "pure visual" channels and were:

(1) Figure

(2) Face plus Content-Filtered Voice

and (3) Body plus Randomized Spliced Voice

Data failed to indicate a significant pattern of relationships between "pure visual" and "pure auditory" channels with regard to the Content-Filtered Voice channel, since the Face and Body channels did correlate with it at the .01 level. Perhaps additional analyses on these channels are needed on other samples.

Profile of Nonverbal Sensitivity Test

The results of this study indicated that American college white students were more sinsitive to nonverbal cues than American black college students in overall total scores. When the nonverbal channels were analyzed individually, the data revealed racial differences in the perceptions of the following: Face, Figure, Randomized Spliced Voice, Body plus Randomized Spliced Voice, Figure plus Randomized Spliced Voice and the Total score. Perhaps one reason for the American college white

students scoring higher on these channels than the American black college students was that the PONS test reflected westernized nonverbal cues. Previous data suggest that people or cultures more closely associated with the Eurocentric world view score higher on the PONS test (Rosenthal et al., 1979). One can speculate that the American black students retained their cultural identity. However, data from four other channels (Body, Content-Filtered Voice, Face plus Randomized Spliced Voice and Face plus Content-Filtered Voice) do not support this speculation since no significant differences were found between American white and black college students. Thus, American black students scoring as higher on these nonverbal channels may imply a deterioration in cultural identity as it relates to westernized values. It could also be that American black students are beginning to master American nonverbal cues because of their integration in mainstream society. Further studies may indicate similar results or that the data were peculiar to the sample taken.

Results supported Rosenthal's and his associates (1979) findings that women traditionally do better in decoding nonverbal behavior in overall total scores. When the channels were analyzed individually, the obvious did not occur. The channels on the Face, Figure, Face plus Randomized Spliced Voice, Face plus Content-Filtered Voice, and Figure plus Randomized Spliced Voice, did support this finding. However the data indicated no significant differences between college males and females in decoding the Body, Randomized Spliced Voice,

Content-Filtered Voice, Body plus Randomized Spliced Voice, Body plut Content-Filtered Voice, and Figure plus Content-Filtered channels. Needless to say, there are over five individual channels where males and females scored about the same. Perhaps when Rosenthal and his associates collected their over two-hundred samples in the early 1970's, women were more sensitive to nonverbal cues. Due to the last ten years of increased awareness, emphasis and attention given to nonverbal communication, men may be becoming more in tuned and sensitive to what seems to be insight into human communication. Men may recognize that there are financial and social advantages to the entire notion of nonverbal communication. As opportunities for the professional woman increase, women, on the other hand, may be getting less preoccupied with nonverbal cues. For it has been suggested (Rosenthal et al., 1979) that professionals are less sensitive to nonverbal cues. Secondly, in the past, researchers (i.e., Hall. 1977) suggested that oppression may be a reason why females are more sensitive to nonverbal cues. However, the trend could be changing as we can see in the relationship between professional opportunities for females and trends in decoding cues of women.

The results of the study did not indicate that college students raised by professional parents/guardians, were more sensitive to nonverbal cues than college students raised by nonprofessional parents/guardians in the overall total scores. When the eleven channels were analyzed individually, the data did not show any significant differences in the Face, Body, Figure, Randomized

Spliced Voice, Content-Filtered Voice, Face plus Randomized Spliced Voice, Face pluse Content-Filtered Voice, Body plus Randomized Spliced voice, Body plus Content-Filtered Voice, Figure plus Randomized Spliced Voice, and Figure plus Content-Filtered Voice channels. However, the data did reveal significant differences between subjects possessing professional and non-professional backgrounds in the Face plus Randomized Spliced Voice channel, and a Sex X Social Class interaction within the Face channel.

The fact that there were no significances in the overall total scores or in ten of the eleven nonverbal channels between students with higher and lower social class family backgrounds, is suggesting social class background as not being an indicator for decoding nonverbal skills. American families, regardless of social class, may emphasize or encourage the professional and social advantages to acquiring these decoding skills. Rosenthal and his associates (1979) stated that individuals acquiring these skills make better social partners and appear to get along with others better than those who lack these nonverbal decoding skills. However, it could be just the opposite. These families could equally discourage the use of nonverbal skills. This is evident in this society's divorce rate, social disorder, lack of understanding and communication with one another if we assume that people having nonverbal decoding skills are better or more effective members in the American society. Also, if it is true that knowledge and skill in nonverbal behavior are growing within

this society as was mentioned earlier in the discussion, nonberbal may play a smaller part in the lives and interaction of American people than expected and often suggested.

The fact that college students from professional family backgrounds are more responsive to the Face plus Randomized Spliced Voice channel than college students from nonprofessional family backgrounds suggests tone of voice (audio) may be given more attention in higher social class family backgrounds when smiles, frowns, and/or head nods are present. One could also assume that parents from this social class expressed their love and hate; scolded and reprimanded through a combination of facial expressions and the raising and/or lowering of the voice as opposed to one or the other. In particular, this is evident in the way males from professional family backgrounds decode Content-Filtered Voice as opposed to males from nonprofessional family backgrounds. However, more studies should be conducted to give clarification.

The Sex X Social Class interaction indicated that females from either types of family backgrounds were more sensitive to the Face channel than the males from nonprofessional family backgrounds. It also revealed that males with professional family backgrounds were more sensitive to the face than males from nonprofessional backgrounds. However, there were no significant differences in scores between females from either types of backgrounds and males with professional family backgrounds.

Belief Systems Analysis Scale

The results from the BSA scale indicated that college blacks are more Afrocentric in their world view than college whites.

Even though these results might appear obvious knowing black people are an extension of Africa and/or Africa itself, while representing its values (Akbar, 1980). Some have suggested that the values of black people have waned in a dominate western culture (Frazier, 1966). As we can see by the results aforementioned, many black people have held on to their traditional world view. Some social scientists' opinions are consistent with these results and refer to this traditonal world view as a cultural carriover (Herskovitz, 1930).

First it must be remembered that one's world view is shaped by particular philosophical assumptions and subsequent values. Consequently, we only use the Afro-Euro dichotomization to establish a cultural backdrop for the evolution of two antithetical conceptual systems. It is believed by some that theoretically, individuals can and do structure their beliefs outside of the generalized cultural frame of references outlined.

A three-way (Race X Sex X Social Class) Analysis of Variance indicated significant differences in BSA mean scores between males and females at the .05 level. However, Scheffe's post hoc test rejected this finding. Even though this finding was rejected, one can speculate that American females are more intrinsic and value the properties associated with character, and those things not necessarily materialized through the five senses, which may be evidencing a feminist world view more closely akin to the African world view. Black and white parents may spend more time instilling these Afrocentric values in their daughters and possible encouraging the Eurocentric values of individualism and competition in males in order to "get or stay ahead " of those around them.

Parents thinking may be that these Eurocentric values are enviable in any male, regardless of race, whereby independence in presence, society, intimate associateions, and financial status obviously overshadows the need to defin self in an Afrocentric orientation, where trust and interdependence (usually considered weaknesses) are present and active in their daily lives. However, further research is needed for clarification on sex differences in BSA mean scores.

Results from the present study did not indicate that students from lower social class family backgrounds were more Afrocentric in their world view than students from higher social class family backgrounds. This result suggested that status, middle class, money, etc., are not factors in determining whether individuals are exposed to Eurocentric versus Afrocentric values. A family's personal security and self-esteem may be variables influencing their world views. That is, competition, achievement at all costs, etc., may be related to the insecurity of the family structure, or insecurities of leading figures in the family, regardless of social class structure.

However, results from the Sex X Social Class interaction (after the post hoc tests) indicated males from nonprofessional family backgrounds were more Afrocentric in their world views than males from professional family backgrounds. Females from both types of family backgrounds were more Afrocentric in their world views than males with professional family backgrounds, but not more so than males with nonprofessional family backgrounds. Yet no differences in sex occurred in nonprofessional family

backgrounds. Perhaps black and white females who are accustomed to some sort of status and material wealth may be educated to prize instrinsic values over material wealth. If it is true that the more independence and desire for material wealth a family enjoys, the less aparent are these intrinsic values, then it can be speculated that females internalize nonverbally that this type of lifestyle is not for them. Further, families may continue to push the female less that the male in professional family backgrounds so is evidenced within this study (i.e., professional males had significantly lower BSA scores than professional females).

The results of this study did not indicated that college students who were more Afrocentric in their world view, were more sensitive to nonverbal cues. In fact, the correlation is directly opposite, however not at a significant level. College students appearing to be more sensitive to nonverbal cues were less Afrocentic in their world view, . This appears to be consistent with Rosenthal and his associates' (1979) data that people and cultures more closely indentified with Eurocentric values are more sensitive to nonverbal cues, at least those represented in the PONS test, and in turn, less Afrocentric in respect to their ontological assumption.

The Afrocentric world view holds that axiological assumption of highest value on interpersonal relationships among men/women versus the Eurocentric axiology of highest value on acquistion of objects. In addition, the more Afrocentric orientation emphasizes ntuology as the primary process, all sets are interrelated through human and spiritual networks versus an emphasis

on technology all sets are repeatable and reproduciable.

The present outcome may emphasize the fact that the PONS test does not represent real life circumstances. The artificialness manufactured perhaps is inherent in the white female sending the cues, the "real life" responses, and/or the judging of the cues involved. It could be that behavioral scientists, up to this point, are not able to preduce a technique that can legitimize real life nonverbal expressions, movements, and behavior.

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